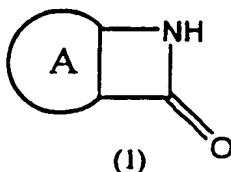


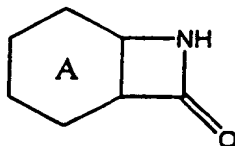
CLAIMS

- Sub A1
1. A process for the preparation of an enantiomerically enriched  $\beta$ -lactam, which comprises enantioselective hydrolysis of the corresponding racemic  $\beta$ -lactam in the presence of a lactamase enzyme capable of enantioselective hydrolysis of 3-azatricyclo[4.2.1.0<sup>2,5</sup>]non-7-en-4-one and 7-azabicyclo[4.2.0]oct-4-en-8-one.
2. A process according to claim 1, wherein the lactamase enzyme is in isolated and purified form.
3. A process according to claim 1, wherein the lactamase enzyme is in the form of a cell paste or intact cells.
4. A process according to any preceding claim, which additionally comprises isolation of the enantiomerically enriched  $\beta$ -amino acid produced by hydrolysis.
5. A process according to claim 4, wherein the isolated  $\beta$ -amino acid is then subjected to a condensation reaction to reform the  $\beta$ -lactam ring.
6. A process according to any preceding claim, wherein the lactam is a fused polycyclic compound of the type represented by formula (1)



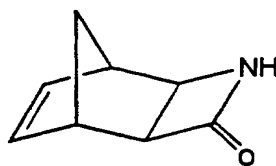
wherein ring A is any monocyclic or any polycyclic ring, optionally substituted with one or more non-interfering groups.

7. A process according to claim 6, wherein the lactam has the formula



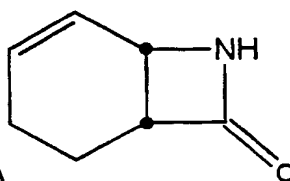
wherein ring A is unsaturated and optionally also bridged or further fused.

- Sub A1
8. A process according to claim 7, wherein the lactam is 3-azatricyclo[4.2.1.0<sup>2,5</sup>]non-7-en-4-one (2)



(2)

9. A process according to claim 1, wherein the lactam is 7-azabicyclo[4.2.0]oct-4-en-8-one (3)



(3)

- 10.(amended) A process according to any preceding claim, wherein the lactamase enzyme is obtainable from a microorganism having the characteristics of that available as the *Rhodococcus globerulus* strain identified as CMC103381, Accession No. NCIMB 41042.
11. Enantiomerically enriched 3-azatricyclo[4.2.1.0<sup>2,5</sup>]non-7-en-4-one of formula (2) as shown in claim 8, in an enantiomeric excess of at least 80%.
12. Enantiomerically enriched 7-azabicyclo[4.2.0]oct-4-en-8-one of formula (3) as shown in claim 9, in an enantiomeric excess of at least 80%.
13. A lactam according to claim 11 or claim 12, wherein the enantiomeric excess is at least 95%.
14. Enantiomerically enriched levorotatory enantiomer according to any of claims 11 to 13.
- 15.(amended) A lactamase enzyme obtainable from a microorganism having the characteristics of that available as the *Rhodococcus globerulus* strain identified as CMC103381, Accession No. NCIMB 41042.
- 16.(amended) *Rhodococcus globerulus* strain identified as CMC103381, Accession No. NCIMB 41042.

Add A2